



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,166	07/25/2001	Joseph Robert Stetter		6224

7590 06/18/2003  
Solomon ZAROMB  
9S 706 William Dr.  
Hinsdale, IL 60521

EXAMINER

TUNG, TA HSUNG

ART UNIT	PAPER NUMBER
----------	--------------

1753

DATE MAILED: 06/18/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/915,166

Applicant(s)

STETTER, J.

Examiner

T. TUNG

Group Art Unit

1753

Paper No. 4

-- The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-26 is/are pending in the application.
- Of the above claim(s) 2-15 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 16-26 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1102

Applicant traverses the requirement to elect species on the ground that all species pertain to the same class/subclass and that there is no showing that the species are patentably distinct.

This traverse is non-persuasive. That the species may be classified in the same class/subclass is not sufficient basis for overcoming an election requirement. By their nature, species are often classified in the same place. However, the searches for the various species outside of that subclass may be widely divergent. As for distinctness, the various species are not considered to be related to each other, since they reach the inventive goal by totally different means. Thus, the species are deemed to be patentably distinct. The requirement to elect species is made final, and claims 2-15 are withdrawn from consideration as being drawn to non-elected subject matter.

Claims 1, 16-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The disclosure is inadequate. Figure 4 is stated to be a section of figure 3 along line A-A' (page 13, line 15 of the specification). Yet, the description of the two figures appear to suggest that they represent distinct embodiments. If the two figures are differing views of the same device, they can not depict distinct embodiments.

Art Unit: 1102

The disclosure of the two working electrodes (claim 22) is also inadequate. If both electrodes are working electrodes, where is the counter electrode? And how are all the electrodes connected in a measuring circuit? Where is the supporting discussion in the specification?

At page 12, line 11, reaction 7 is stated to be an oxidizing reaction. However, reaction 7 at page 2, line 16 appears to be a reduction reaction. Clarification is required.

Claims 20, 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 is not distinct from its parent claim 19 in that the identity of a reaction product of an analyte is not a valid structural distinction.

Claim 22 is incomplete in that it recites only the working electrodes, not the other electrode(s).

Claim 25, line 6, "or" is questioned in that it includes the situation where oxidation and reduction of either the analyte or the redox product may not take place. Where is the basis for that?

Claim 25, line 6, "product" (2d occ) apparently should be --produce--.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1102

Claims 1, 16-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Connery et al 4,076,596.

Connery discloses an amperometric sensor system comprising a working electrode 14, a counter electrode 18 and a reference electrode 40. The working and counter electrodes are closely spaced and interdigitated so that an analyte reaction product formed at the working electrode is immediately re-converted to the analyte at the counter electrode and then reacted again at the working electrode. This results in an amplified measurement signal and improved sensitivity. See col. 5, line 50 to col. 10, line 60.

In regard to claim 16, the embodiment of the patent's figure 4 shows only two electrodes. Thus, the counter electrode in this embodiment can be considered to be a combination of the counter and the reference electrodes.

In regard to claims 20 and 26, see col. 8, lines 1-5 of Connery for chlorine as an analyte.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Connery et al in view of Campbell et al 4,525,704.

Art Unit: 1102

If somehow Connery were construed as not to disclose the combination of a reference electrode and a counter electrode into a single electrode, this claim would differ in that respect.

Campbell discloses the combining of the functions of a reference electrode and a counter electrode into a single electrode. See col. 4, line 25. It would have been obvious for Connery to do the same so as to simplify the sensor structure and save on material cost.

Liu et al 4,571,292 discloses interdigitated electrodes to permit multiple reactions to occur in close proximity to an electrolyte (col. 9, line 58). Chand et al 3,622,487 discloses nitrogen oxide as an analyte. See the abstract. Semersky et al 4,172,770 discloses an electrolytic sensor with either a three-electrode arrangement or a two-electrode arrangement. See col. 4, lines 31-53.

The examiner can be reached at 703-308-3329. His supervisor Nam Nguyen can be reached at 703-308-3322. Any general inquiry should be directed to the receptionist at 703-308-0661. A fax number for TC 1700 is 703-872-9310.



Ta Tung

Primary Examiner

Art Unit 1753